



California Solar Initiative (CSI) Program Forum

August 24, 2016

Photo Credit: Courtesy Pacific Gas and Electric Company



Agenda

- **Introductions**
- **Background for Program Changes**
- **Summary of Changes**
- **Calculating Buyout Amount**
- **Project Buyout Examples**
- **Exceptions to the Rules**
- **How to Find Reported PBI KWh Data**
- **Questions**

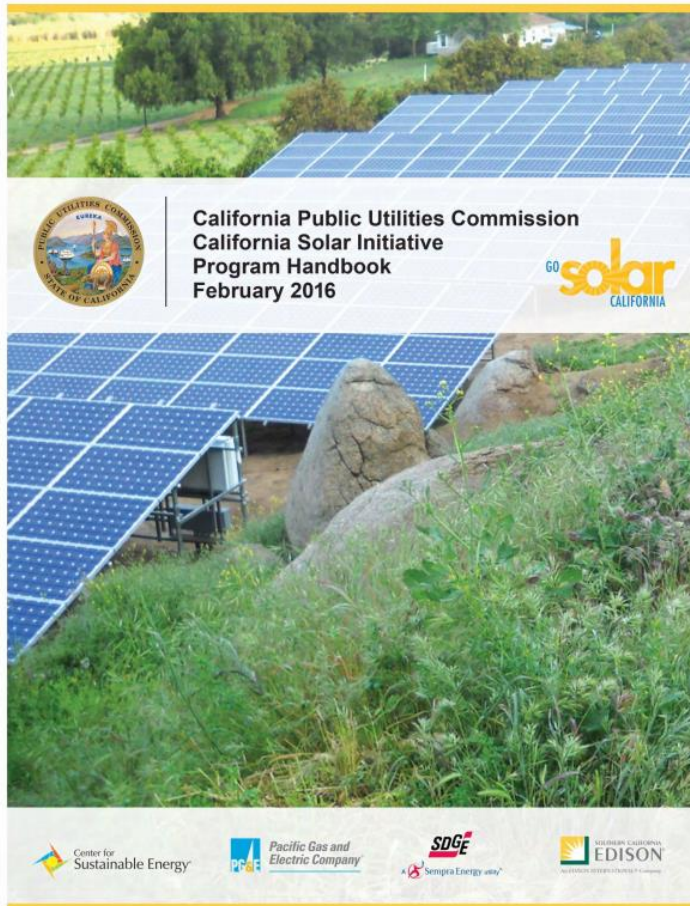


Background

- D.06-08-028 adopted current PBI payment structure, which mandated that Program Administrators (PAs) pay any solar facility receiving PBI incentive rate for actual output.
- Currently, PBI projects report kWh production for 5 yrs. (60 months)
- This has led to administrative budget complications and created an expanse between the date the program will Sunset and when the last PBI payment will be issued.
- In December 2015, CPUC approved D.15-12-023 implementing the proposal to expedite the buyout structure for all new and existing PBI projects.
- **The Expedited Buyout Structure will consist of a minimum of 2 yrs. (24 months) reporting, followed by a lump sum buyout for the remaining kWh.**
- **Changes will take effect upon CSI Sunset date 12/31/2016**



All Changes are detailed in the CSI Handbook



Section 3.3.1

http://www.gosolarcalifornia.ca.gov/documents/CSI_HANDBOOK.PDF



Summary of Changes

What does this mean for customers?

- Upon CSI Sunset, depending on how long a project has been reporting...
 - Some projects will receive a final lump sum buyout
 - While others will continue monthly reporting -until the minimum reporting duration has been met, followed by a lump sum buyout
- At the end of this year, PBI projects will be categorized into the 3 categories below:
 - **NEW**
 - **EXISTING**
 - **MATURE**



Summary of Changes

Application Category	Report #	Action
New	1 - 23	Continue monthly reporting to month #24, then receive lump sum buyout
Existing	24 - 48	Cease receiving monthly payout and will receive lump sum buyout
Mature	49 - 60	Have the option to transition into lump sum buyout ("Opt-in") or continue to report monthly ("Opt-out")

- Cycle 1 projects will be categorized using kWh data up to 12/31/16
- Cycle 2 projects will be categorized using kWh data up to 12/15/16
- Mature applications will opt-out of the expedited buyout, by default.

Lump Sum payments will be issued approximately **45 days** after final scheduled meter read from PDP.



Calculating your Buyout Amount

$$\text{Lump Sum Buyout (\$)} = [\text{Remaining kWh}] \times [\text{Reserved Rate}]$$

To determine the Remaining kWh & Lump Sum Buyout Amount for a PBI Project, the Program Administrator will:

1. Determine ACTUAL PRODUCTION
2. Determine ESTIMATED PRODUCTION
3. Determine PERFORMANCE FACTOR (PF)
4. Determine REMAINING KWH
5. Determine LUMP SUM BUYOUT AMOUNT



Lump Sum Buyout Calculation

1. Determine ACTUAL PRODUCTION : Sum of the kWh reported data
 - a. New Applications: Initial 24 months of kWh data
 - b. Existing and Mature (opt-in) applications: all kWh data reported

2. Determine ESTIMATED PRODUCTION
 - a. (Monthly EPBB) * number of months reported = ESTIMATED PRODUCTION
 - i. For New applications, the “number of months reported” will be 24

$$\text{Monthly EPBB} = \text{Annual EPBB} / 12$$



Lump Sum Buyout Calculation

3. Determine PERFORMANCE FACTOR (PF)

a. $(\text{ACTUAL PRODUCTION} / \text{ESTIMATED PRODUCTION}) * 100 = \text{PF}\%$

4. Determine REMAINING KWH

a. $(\text{PF} * \text{monthly EPBB}) * \text{number of months remaining until 60} = \text{REMAINING KWH}$

5. Determine LUMP SUM BUYOUT AMOUNT

a. $(\text{REMAINING KWH} * \text{Reserved Rate}) = \text{LUMP SUM BUYOUT AMOUNT \$\$}$



Example - Detailed

Reserved Rate (per kWh)	\$ 0.22
Annual EPBB (kWh per year)	7906
Monthly EPBB (kWh per month)	658.8333333
Reporting Duration (months)	24
EPBB for Reporting Duration (kWh total)	15,812
# of Months Remaining	36

1. Determine ACTUAL PRODUCTION : Sum of the kWh reported
= **16,683 kWh Actual**
2. Determine ESTIMATED PRODUCTION
 - a. (Monthly EPBB) * actual reporting duration
= **15,812 kWh Estimated**
3. Determine PERFORMANCE FACTOR (PF%)
 - a. (ACTUAL PRODUCTION / ESTIMATED PRODUCTION) * 100
= **105.5084746% as compared to EPBB**
4. Determine REMAINING KWH
 - a. (PF * monthly EPBB) * number of months remaining until 60 = REMAINING KWH
= **25,024.5 kWh remaining**
5. Determine LUMP SUM BUYOUT AMOUNT
 - a. (REMAINING KWH * Reserved Rate)
= **\$5,505.39 Buyout Amount**

# of months	Production End Date	Actual Production (kWh)
1	Jan-14	710
2	Feb-14	735
3	Mar-14	678
4	Apr-14	680
5	May-14	690
6	Jun-14	695
7	Jul-14	710
8	Aug-14	705
9	Sep-14	720
10	Oct-14	675
11	Nov-14	680
12	Dec-14	680
13	Jan-15	675
14	Feb-15	680
15	Mar-15	675
16	Apr-15	695
17	May-15	700
18	Jun-15	690
19	Jul-15	695
20	Aug-15	715
21	Sep-15	710
22	Oct-15	705
23	Nov-15	695
24	Dec-15	690
24 months reported		16,683

SIMPLIFIED Lump Sum Buyout Calculation

$$\text{Lump Sum Buyout} = [\text{Remaining kWh}] * [\text{Reserved Rate}]$$

$$=[(\text{\# of remaining months}) * (\text{Actual Production} / \text{\# of months reported})] * [\text{Reserved Rate}]$$

This is a simplified version of the process that was presented in the previous slides.

This formula can be used as an alternative to the detailed calculation,
and may be easier for customers to use.

**Both formulas and calculations provide the same result*



Example - simplified

Reserved Rate (per kWh)	\$ 0.22
Annual EPBB (kWh per year)	7906
Monthly EPBB (kWh per month)	658.8333333
Reporting Duration (months)	24
EPBB for Reporting Duration (kWh total)	15,812
# of Months Remaining	36

Lump Sum Buyout =

*$[(\# \text{ of remaining months}) * (\text{Actual Production} / \# \text{ of months reported})]$*

$ [\text{Reserved Rate}]$*

$= [(36\text{months}) * (16,683 \text{ kWh} / 24 \text{ months})] * [\$0.22/\text{kWh}]$

= \$5,505.39 Buyout Amount

# of months	Production End Date	Actual Production (kWh)
1	Jan-14	710
2	Feb-14	735
3	Mar-14	678
4	Apr-14	680
5	May-14	690
6	Jun-14	695
7	Jul-14	710
8	Aug-14	705
9	Sep-14	720
10	Oct-14	675
11	Nov-14	680
12	Dec-14	680
13	Jan-15	675
14	Feb-15	680
15	Mar-15	675
16	Apr-15	695
17	May-15	700
18	Jun-15	690
19	Jul-15	695
20	Aug-15	715
21	Sep-15	710
22	Oct-15	705
23	Nov-15	695
24	Dec-15	690
24 months reported		16,683



Exceptions to the rules...

- Communication Errors

- New applications that face communication error in the first 24 months of reporting may be eligible to “skip” the respective month of reporting without penalty.
 - This “skipped” month will have the monthly EPBB estimate used as a “filler” for determining PF, but will not be paid on.
 - The “skipped” months will not result in an extended monthly reporting timeline. Instead, the quantity of “skipped” months, during the initial 24-month timeline, will be included in the “remaining months” and Lump Sum Buyout.

The PA may consider the historical performance trends when defining the PF for each project.



Exceptions to the rules (for either method)...

- System Failures

- For projects that face system failure for the entire 30-day timeframe, the monthly incentive will be forfeited.
- To determine the ACTUAL production for this project, the forfeited month could be associated with a 0 kWh value.
- For projects that face system failure for a portion of the month, the partial production data will be reported, paid on, and used in determining ACTUAL production.

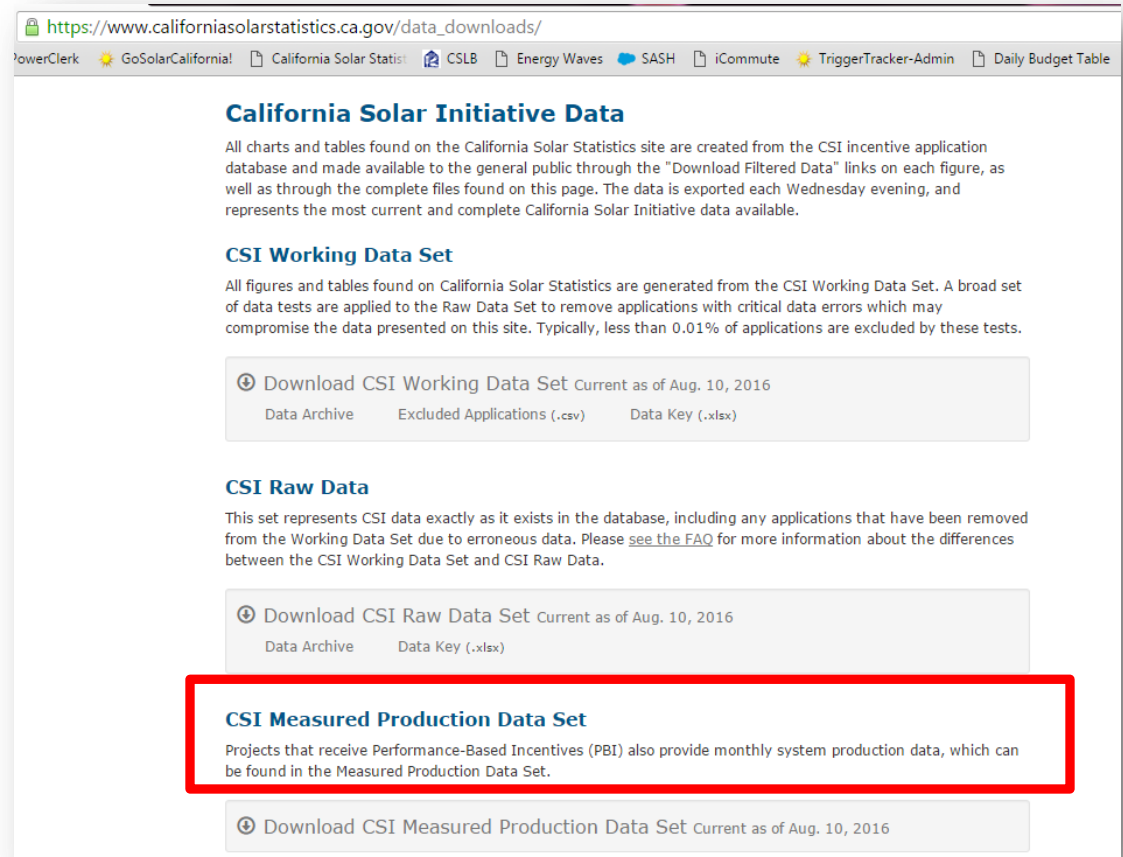
The PA may consider the historical performance trends when defining the PF for each project.



Where can I find my reported PBI kWh data?

PBI Data is public!

www.CaliforniaSolarStatistics.ca.gov



CONTACT YOUR PDP WITH QUESTIONS ABOUT YOUR PDP / PMRS CONTRACT

PDP Name	Email
AlsoEnergy	reporting@alsoenergy.com
Apparent, Inc	brandon.kolbe@apparent.com
Citigreen Solar, previously Blue Cat Studios	jpotter@bluecatstudio.com
Deck Monitoring	reporting@alsoenergy.com
Draker Energy	ben.perkins@drakerenergy.com
Enphase Energy, Inc.	pdp@enphaseenergy.com
GreenPowerMonitor	informes@greenpowermonitor.com
HelioPower	francis.bebila@heliopower.com
Locus Energy, LLC	reporting@locusenergy.com
Meteocontrol	b.compton@meteocontrol.com
Natcon 7	ca@natcon7.com
NergyOS, Inc. dba GluNetworks	support@nergyos.com
PowerDash	stephen@powerdash.com
PowerOne (formerly Fat Spaniel & NSC / Energy Recommerce)	sonia.hall@us.abb.com
Recurrent Energy	info@recurrentenergy.com
SolarCity	commercial.incentives@solarcity.com
Solar-Log / Solar Data Systems	reporting@solar-log.com
Solectria Renewables	monitoring@solren.com
Sun Edison	prijal@sunedison.com
Thompson Tech Industries	tom.hawkins@ttisolar.com
Trimark Associates	mdma_support@trimarkassoc.com
United Solar Ovonics, LLC (formerly Solar Integrated Technologies)	services@arguson.com
WattMetrics, LLC	support@wattmetrics.com

If you don't see your PDP company listed here, please contact your Program Administrator.

QUESTIONS?

http://www.gosolarcalifornia.ca.gov/documents/CSI_HANDBOOK.PDF

Contact your Program Administrator

Center for Sustainable Energy (CSE): pbi@energycenter.org

Southern California Edison (SCE): csigroup@sce.com

Pacific Gas & Electric (PG&E): solar@pge.com



APPENDIX



"New Application" Detailed Calculation	
Lump Sum Buyout (\$) = [Remaining kWh] * [Reserved Rate]	
Reserved Rate (\$)	\$0.22
Annual EPBB (kWh per year)	7906
Monthly EPBB (kWh per month)	658.83
Reporting Duration (x months)	24
EPBB for Reporting Duration (kWh total)	15812
# of Months Remaining (60-x)	36
Actual Production (kWh total)	16683
Performance Factor =	$(16683 / 15812) * 100 = 105.51\%$
Remaining kWh =	$[(1.055084746 * 658.8333333\text{kWh}) * (36 \text{ months})] = 25024.5$
Lump Sum Buyout (\$) =	$[25042.5 \text{ kWh remaining}] * [\$0.22] = \text{\$5,505.39}$
"New Application" Simplified Calculation	
Lump Sum Buyout (\$) = [(# of remaining months) * (Actual Production / # of months reported)] * [Reserved Rate]	
Reserved Rate (\$)	\$0.22
Reporting Duration (x months)	24
# of Months Remaining (60-x)	36
Actual Production (kWh total)	16683
Lump Sum Buyout (\$) =	$[(36 \text{ months remaining}) * (16683 \text{ kWh reported} / 24 \text{ months reported})] * [\$0.22] = \text{\$5,505.39}$

"Existing Application" Detailed Calculation	
Lump Sum Buyout (\$) = [Remaining kWh] * [Reserved Rate]	
Reserved Rate (\$)	\$0.22
Annual EPBB (kWh per year)	7906
Monthly EPBB (kWh per month)	658.83
Reporting Duration (x months)	35
EPBB for Reporting Duration (kWh total)	23059.17
# of Months Remaining (60-x)	25
Actual Production (kWh total)	22050
Performance Factor =	$(22050 / 23059.17) * 100 = 95.62\%$
Remaining kWh =	$[(.956235632 * 658.8333333\text{kWh}) * (25 \text{ months})] = 15750$
Lump Sum Buyout (\$) =	$(15750.00 \text{ kWh remaining}) * (\$0.22) = \text{\textcolor{red}{\$3,465.00}}$
"Existing Application" Simplified Calculation	
Lump Sum Buyout (\$) = [(# of remaining months) * (Actual Production / # of months reported)] * [Reserved Rate]	
Reserved Rate (\$)	\$0.22
Reporting Duration (x months)	35
# of Months Remaining (60-x)	25
Actual Production (kWh total)	22050
Lump Sum Buyout (\$) =	$[(25 \text{ months remaining}) * (22050 \text{ kWh reported} / 35 \text{ months reported})] * [\$0.22] = \text{\textcolor{red}{\$3465.00}}$

